

What is claimed is:

1. A magnetic film for a magnetic head,
comprising:
a nonmagnetic layer including at least one selected from a group of Ru, Rh, Ir, Cr, Cu, Au, Ag, Pt and Pd;
a magnetic layer including Fe and Co,
wherein anisotropy magnetic field is 0.8 kA/m or more.
2. The magnetic film according to claim 1,
wherein the saturation magnetic flux density has uniaxial magnetic anisotropy, and
residual stress in said film is ± 0.5 GPa or less.
3. A magnetic film for a magnetic head,
comprising:
nonmagnetic layers, each of which has a first layer section and a second layer section; and
magnetic layers, each of which includes Fe and Co,
wherein the first layer section and the second layer section are respectively include at least one selected from a group of Ru, Rh, Ir, Cr, Cu, Au, Ag, Pt and Pd,
said nonmagnetic layer and said magnetic layer are alternately piled, and
thickness of each magnetic layer is 100 nm or less.
4. The magnetic film according to claim 3,
wherein said magnetic layer includes 40-80 at% of Fe.
5. A magnetic film for a magnetic head,

comprising:
a nonmagnetic layer, which has a first layer section and a second layer section; and
a magnetic layer, which includes Fe and Co,
wherein the first layer section and the second layer section are respectively include at least one selected from a group of Ru, Rh, Ir, Cr, Cu, Au, Ag, Pt and Pd,
boundary parts of said magnetic layer, which contact said nonmagnetic layer, includes 30-65 at% of Fe, and
an intermediate part of said magnetic layer, which is formed between the boundary parts, includes 40-80 at% of Fe.

6. The magnetic film according to claim 5,
wherein thickness of said magnetic layer is 100 nm or less.
7. The magnetic film according to claim 1,
wherein roughness of the surface of said magnetic layer is 2 nm or less.
8. The magnetic film according to claim 3,
wherein roughness of the surface of said magnetic layer is 2 nm or less.
9. The magnetic film according to claim 5,
wherein roughness of the surface of said magnetic layer is 2 nm or less.
10. The magnetic film according to claim 1,
wherein total saturation magnetic flux density is 2.0T or more.
11. The magnetic film according to claim 3,
wherein total saturation magnetic flux density is 2.0T or more.

12. The magnetic film according to claim 5,
wherein total saturation magnetic flux density is 2.0T or more.
13. A magnetic film for a magnetic head including Fe and Co as main elements,
wherein said magnetic film has a body-centered cubic lattice structure, in which intensity ratio of (110) and (211) crystal planes in a film growth direction is $I(211)/I(110)=2-100\%$.
14. The magnetic film according to claim 13,
wherein said magnetic film has uniaxial magnetic anisotropy having a easy axis of magnetization and a hard axis of magnetization.
15. The magnetic film according to claim 14,
wherein a coercive force of the hard axis of magnetization is 0.8 kA/m or less.
16. The magnetic film according to claim 14,
wherein residual magnetization ratio of the hard axis of magnetization is 30 % or less.